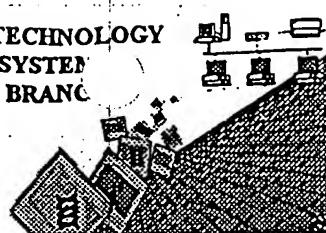


BIOTECHNOLOGY
SYSTEM
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/517,707
Source: PCT
Date Processed by STIC: 12-22-04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/517,707

ATTN: NEW RULES CASES: PLEASE DISREGARD ENCLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 Wrapped Nucleic The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
Wrapped Aminos was relieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 Misaligned Amino Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>.<223> section that some may be missing

6 PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>.<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>.<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>.<223> sections for Artificial or Unknown sequences.

7 Skipped Sequences (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO X (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS (Do not insert any subheadings under this heading)
 (ii) SEQUENCE DESCRIPTION SEQ ID NO X (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

8 Skipped Sequences (NEW RULES) Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences.

Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 <210> sequence id number
 <400> sequence id number
 000

9 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.82 of Sequence Rules, use of <220>.<223> is MANDATORY if n's or Xaa's are present.

In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 Invalid <213> Response Per 1.82 of Sequence Rules, the only valid <213> responses are Unknown, Artificial Sequence, or scientific name (Genus/species). <220>.<223> section is required when <213> response is Unknown or is Artificial Sequence.

11 Use of <220> Sequence(s) missing the <220> "feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of generic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.82 of Sequence Rules)

12 PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/517,707

DATE: 12/22/2004
TIME: 16:16:10

Input Set : A:\MER134SEQLIST.TXT
Output Set: N:\CRF4\12222004\J517707.raw

```

4 <110> APPLICANT: BAKER, Matthew
5           CARR, Francis J.
7 <120> TITLE OF INVENTION: MODIFIED BRYODIN 1 WITH REDUCED
8           IMMUNOGENICITY
10 <130> FILE REFERENCE: MER-134
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/517,707
C--> 12 <141> CURRENT FILING DATE: 2004-12-10
12 <150> PRIOR APPLICATION NUMBER: PCT/EP03/06055
13 <151> PRIOR FILING DATE: 2003-06-10
15 <150> PRIOR APPLICATION NUMBER: EP 02012911.0
16 <151> PRIOR FILING DATE: 2002-06-11
18 <160> NUMBER OF SEQ ID NOS: 183
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 267
24 <212> TYPE: PRT
25 <213> ORGANISM: Homo sapiens
27 <400> SEQUENCE: 1
28 Asp Val Ser Phe Arg Leu Ser Gly Ala Thr Thr Ser Tyr Gly Val
29   1          5          10          15
30 Phe Ile Lys Asn Leu Arg Glu Ala Leu Pro Tyr Glu Arg Lys Val Tyr
31   20         25         30
32 Asn Ile Pro Leu Leu Arg Ser Ser Ile Ser Gly Ser Gly Arg Tyr Thr
33   35         40         45
34 Leu Leu His Leu Thr Asn Tyr Ala Asp Glu Thr Ile Ser Val Ala Val
35   50         55         60
36 Asp Val Thr Asn Val Tyr Ile Met Gly Tyr Leu Ala Gly Asp Val Ser
37  65          70          75          80
38 Tyr Phe Phe Asn Glu Ala Ser Ala Thr Glu Ala Ala Lys Phe Val Phe
39   85         90         95
40 Lys Asp Ala Lys Lys Val Thr Leu Pro Tyr Ser Gly Asn Tyr Glu
41   100        105        110
42 Arg Leu Gln Thr Ala Ala Gly Lys Ile Arg Glu Asn Ile Pro Leu Gly
43   115        120        125
44 Leu Pro Ala Leu Asp Ser Ala Ile Thr Thr Leu Tyr Tyr Tyr Thr Ala
45   130        135        140
46 Ser Ser Ala Ala Ser Ala Leu Leu Val Leu Ile Gln Ser Thr Ala Glu
47  145        150        155        160
48 Ser Ala Arg Tyr Lys Phe Ile Glu Gln Gln Ile Gly Lys Arg Val Asp
49   165        170        175
50 Lys Thr Phe Leu Pro Ser Leu Ala Thr Ile Ser Leu Glu Asn Asn Trp
51   180        185        190
52 Ser Ala Leu Ser Lys Gln Ile Gln Ile Ala Ser Thr Asn Asn Gly Gln

```

*Dates Not Comply
Corrected Diskette Needed
(PS. 3-4)*

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/517,707

DATE: 12/22/2004
TIME: 16:16:10

Input Set : A:\MER134SEQLIST.TXT
Output Set: N:\CRF4\12222004\J517707.raw

53 195 200 205
54 Phe Glu Ser Pro Val Val Leu Ile Asp Gly Asn Asn Gln Arg Val Ser
55 210 215 220
56 Ile Thr Asn Ala Ser Ala Arg Val Val Thr Ser Asn Ile Ala Leu Leu
57 225 230 235 240
58 Leu Asn Arg Asn Asn Ile Ala Ala Ile Gly Glu Asp Ile Ser Met Thr
59 245 250 255
60 Leu Ile Gly Phe Glu His Gly Leu Tyr Gly Ile
61 260 265
64 <210> SEQ ID NO: 2
65 <211> LENGTH: 21
66 <212> TYPE: PRT
67 <213> ORGANISM: Homo sapiens
69 <400> SEQUENCE: 2
70 Arg Tyr Thr Leu Leu His Leu Thr Asn Tyr Ala Asp Glu Thr Ile Ser
71 1 5 10 15
72 Val Ala Val Asp Val
73 20
76 <210> SEQ ID NO: 3
77 <211> LENGTH: 15
78 <212> TYPE: PRT
79 <213> ORGANISM: Homo sapiens
81 <400> SEQUENCE: 3
82 Ala Thr Glu Ala Ala Lys Phe Val Phe Lys Asp Ala Lys Lys Lys
83 1 5 10 15
86 <210> SEQ ID NO: 4
87 <211> LENGTH: 24
88 <212> TYPE: PRT
89 <213> ORGANISM: Homo sapiens
91 <400> SEQUENCE: 4
92 Glu Arg Leu Gln Thr Ala Ala Gly Lys Ile Arg Glu Asn Ile Pro Leu
93 1 5 10 15
94 Gly Leu Pro Ala Leu Asp Ser Ala
95 20
98 <210> SEQ ID NO: 5
99 <211> LENGTH: 27
100 <212> TYPE: PRT
101 <213> ORGANISM: Homo sapiens
103 <400> SEQUENCE: 5
104 Ile Thr Thr Leu Tyr Tyr Thr Ala Ser Ser Ala Ala Ser Ala Leu
105 1 5 10 15
106 Leu Val Leu Ile Gln Ser Thr Ala Glu Ser Ala
107 20 25
110 <210> SEQ ID NO: 6
111 <211> LENGTH: 21
112 <212> TYPE: PRT
113 <213> ORGANISM: Homo sapiens
115 <400> SEQUENCE: 6
116 Ala Thr Ile Ser Leu Glu Asn Asn Trp Ser Ala Leu Ser Lys Gln Ile

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/517,707

DATE: 12/22/2004
TIME: 16:16:10

Input Set : A:\MER134SEQLIST.TXT
Output Set: N:\CRF4\12222004\J517707.raw

```

117 1 5 10 15
118 Gln Ile Ala Ser Thr
119 20
122 <210> SEQ ID NO: 7
123 <211> LENGTH: 268
124 <212> TYPE: PRT
125 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Modified byrodin 1 protein
W--> 130 <221> VARIANT What about location 1? 2
131 <222> LOCATION: 49, 50, 52, 55
132 <223> OTHER INFORMATION: Xaa=Ala, Gly, Pro
133 Xaa=Met, Ala, Gly, Pro, Ile
134 Xaa=Ala, Gly, Pro
135 Xaa=Pro, Tyr
W--> 137 <221> VARIANT See ps. 4
138 <222> LOCATION: 56, 61, 65, 67
139 <223> OTHER INFORMATION: Xaa=Thr, Ser
140 Xaa=Pro
141 Xaa=Ala, Gly, Pro
142 Xaa=Ala, Gly, Pro
W--> 144 <221> VARIANT
145 <222> LOCATION: 95, 96, 104
146 <223> OTHER INFORMATION: Xaa=Ala, Gly, Pro, His, Asp, Glu, Asn, Gln, Lys,
147 Arg, Ser, Thr
148 Xaa=Ala, Gly, Pro
149 Xaa=Ala, Gly, Pro
W--> 151 <221> VARIANT
152 <222> LOCATION: 115, 118, 120, 121
153 <223> OTHER INFORMATION: Xaa=Ala, Pro, Ser, Thr, His, Lys
154 Xaa=Thr
155 Xaa=His
156 Xaa=Ser
W--> 158 <221> VARIANT
159 <222> LOCATION: 122, 123, 126
160 <223> OTHER INFORMATION: Xaa=Ala, Ser, thr, Pro, Asn, Asp, Glu, Gly, His,
161 Lys, Gln
162 Xaa=Thr
163 Xaa=Ala, Pro
W--> 165 <221> VARIANT
166 <222> LOCATION: 130, 133, 137, 140
167 <223> OTHER INFORMATION: Xaa=Ala, Ile, Phe, Gly, Met, Pro, Val, Trp, Tyr
168 Xaa=Phe, Pro, Trp
169 Xaa=Ala, Gly, Pro
170 Xaa=Ala, Gly, Pro
W--> 173 <221> VARIANT
174 <222> LOCATION: 142, 143, 152, 153
175 <223> OTHER INFORMATION: Xaa=Ala, Gly, Pro
176 Xaa=Ala, Gly, Pro

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/517,707

DATE: 12/22/2004
TIME: 16:16:10

Input Set : A:\MER134SEQLIST.TXT
Output Set: N:\CRF4\12222004\J517707.raw

177 Xaa=Ala, Gly, Pro, Ser, Thr
 178 Xaa=Ala, Gly, Pro, Ile, Met, Ser, Thr
W--> 180 <221> VARIANT
 181 <222> LOCATION: 154, 155
 182 <223> OTHER INFORMATION: Xaa=Ala, Gly, Pro
 183 Xaa=Ala, Gly, Pro, Ser, Thr, His, Asp, Asn, Gln,
 184 Lys, Arg
W--> 186 <221> VARIANT
 187 <222> LOCATION: 187, 189
 188 <223> OTHER INFORMATION: Xaa=Ala, Gly, Pro, Thr, Ser, His, Lys, Arg, Asp,
 189 Glu, Asn, Gln
 190 Xaa=Ala, Gly, Pro, Thr, Ser, His, Lys, Arg, Asp,
 191 Glu, Asn, Gln
W--> 193 <221> VARIANT
 194 <222> LOCATION: 196, 198
 195 <223> OTHER INFORMATION: Xaa=Gln
 196 Xaa=His, Lys, Arg, Asp, Glu, Asn,, Phe, Leu, Pro,
 197 Ser, Tyr, Trp
W--> 199 <221> VARIANT
 200 <222> LOCATION: 200, 202
 201 <223> OTHER INFORMATION: Xaa=Ala, Gly, Pro, Thr, Ser, His, Lys, Arg, Asp,
 202 Glu, Asn, Gln
 203 Xaa=Asp

See item # 9 on error summary sheet.

W--> 205 <221> 7

W--> 206 Xaa Asp Val Ser Phe Arg Leu Ser Gly Ala Thr Thr Ser Tyr Gly

207 1	5	10	15													
208 Val	Phe	Ile	Lys	Asn	Leu	Arg	Glu	Ala	Leu	Pro	Tyr	Glu	Arg	Lys	Val	
209	20								25				30			
210	Tyr	Asn	Ile	Pro	Leu	Leu	Arg	Ser	Ser	Ile	Ser	Gly	Ser	Gly	Arg	Tyr
211		35						40				45				
212	Xaa	Xaa	Leu	Xaa	Leu	Thr	Xaa	Xaa	Ala	Asp	Glu	Thr	Xaa	Ser	Val	Ala
213		50						55				60				
214	Xaa	Asp	Xaa	Thr	Asn	Val	Tyr	Ile	Met	Gly	Tyr	Leu	Ala	Gly	Asp	Val
215	65				70				75				80			
216	Ser	Tyr	Phe	Phe	Asn	Glu	Ala	Ser	Ala	Thr	Glu	Ala	Ala	Lys	Xaa	Xaa
217					85				90				95			
218	Phe	Lys	Asp	Ala	Lys	Lys	Xaa	Thr	Leu	Pro	Tyr	Ser	Gly	Asn	Tyr	
219		100						105				110				
220	Glu	Arg	Xaa	Gln	Thr	Xaa	Ala	Xaa	Xaa	Xaa	Glu	Asn	Xaa	Pro	Leu	
221		115						120				125				
222	Gly	Xaa	Pro	Ala	Xaa	Asp	Ser	Ala	Xaa	Thr	Thr	Xaa	Tyr	Xaa	Xaa	Thr
223		130						135				140				
224	Ala	Ser	Ser	Ala	Ala	Ser	Ala	Xaa	Xaa	Xaa	Ile	Gln	Ser	Thr	Ala	
225	145				150				155				160			
226	Glu	Ser	Ala	Arg	Tyr	Lys	Phe	Ile	Glu	Gln	Gln	Ile	Gly	Lys	Arg	Val
227		165							170				175			
228	Asp	Lys	Thr	Phe	Leu	Pro	Ser	Leu	Ala	Thr	Xaa	Ser	Xaa	Glu	Asn	Asn
229		180							185				190			
230	Trp	Ser	Ala	Xaa	Ser	Xaa	Gln	Xaa	Ala	Ser	Thr	Asn	Asn	Gly		

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/517,707

DATE: 12/22/2004
TIME: 16:16:10

Input Set : A:\MER134SEQLIST.TXT
Output Set: N:\CRF4\12222004\J517707.raw

231 195 200 205
232 Gln Phe Glu Ser Pro Val Val Leu Ile Asp Gly Asn Asn Gln Arg Val
233 210 215 220
234 Ser Ile Thr Asn Ala Ser Ala Arg Val Val Thr Ser Asn Ile Ala Leu
235 225 230 235 240
236 Leu Leu Asn Arg Asn Asn Ile Ala Ala Ile Gly Glu Asp Ile Ser Met
237 245 250 255
238 Thr Leu Ile Gly Phe Glu His Gly Leu Tyr Gly Ile
239 260 265
242 <210> SEQ ID NO: 8
243 <211> LENGTH: 13
244 <212> TYPE: PRT
245 <213> ORGANISM: Artificial Sequence
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Flu protein fragment
250 <400> SEQUENCE: 8
251 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr
252 1 5 10
255 <210> SEQ ID NO: 9
256 <211> LENGTH: 15
257 <212> TYPE: PRT
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Chlamydia peptide
263 <400> SEQUENCE: 9
264 Lys Val Val Asp Gln Ile Lys Lys Ile Ser Lys Pro Val Gln His
265 1 5 10 15
268 <210> SEQ ID NO: 10
269 <211> LENGTH: 13
270 <212> TYPE: PRT
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Fragments of Bryodin 1
276 <400> SEQUENCE: 10
277 Val Ser Phe Arg Leu Ser Gly Ala Thr Thr Ser Tyr
278 1 5 10
281 <210> SEQ ID NO: 11
282 <211> LENGTH: 13
283 <212> TYPE: PRT
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Fragments of Bryodin 1
289 <400> SEQUENCE: 11
290 Phe Arg Leu Ser Gly Ala Thr Thr Ser Tyr Gly Val
291 1 5 10
294 <210> SEQ ID NO: 12
295 <211> LENGTH: 13
296 <212> TYPE: PRT
297 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/517,707

DATE: 12/22/2004
TIME: 16:16:11

Input Set : A:\MER134SEQLIST.TXT
Output Set: N:\CRF4\12222004\J517707.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

~~Seq#:7; Xaa Pos. 1,49,50,52,55,56,61,65,67,95,96,104,115,118,120,121,122~~
~~Seq#:7; Xaa Pos. 123,126,130,133,137,140,142,143,152,153,154,155,187,189~~
~~Seq#:7; Xaa Pos. 196,198,200,202~~

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/517,707

DATE: 12/22/2004
TIME: 16:16:11

Input Set : A:\MER134SEQLIST.TXT
Output Set: N:\CRF4\12222004\J517707.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:130 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:137 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:144 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:151 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:158 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:165 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:173 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:180 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:186 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:193 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:199 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:205 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
M:341 Repeated in SeqNo=7